

REMARKS

The present amendment is responsive to the Office Action mailed October 20, 2006. Claim 4 has been amended. No new matter has been introduced by this amendment. Claims 7-10 were previously cancelled. Therefore, claims 1-6 and 11-18 are again presented for the Examiner's consideration in view of the following comments. A petition for a one (1) month extension of time is submitted herewith.

Claims 1, 3, 4, 6 and 11-16 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,635,978 ("*Alten*") in view of U.S. Patent No. 5,442,390 ("*Hooper*"). Applicant respectfully traverses the rejection.

Applicant submits that a *prima facie* case of obviousness with regard to independent claims 1, 4, 11 and 12 has not been met and the rejection should be withdrawn for at least the following reasons: (1) the cited references, either alone or in combination, do not teach or suggest every element of the claimed invention; (2) there is no motivation to modify the system of *Alten* in view of the teachings of *Hooper* to arrive at the claimed invention; and (3) there is no reasonable expectation of success.

With regard to the first reason, neither *Alten* nor *Hooper*, either alone or in combination, discloses or otherwise suggests all of the limitations in each of the independent claims.

By way of example only, claim 1 includes "production means for producing a retrieval table based on the program guide information, the retrieval table comprising a plurality of time slots each having a predetermined length of time including predetermined start and end times that are independent of the program broadcast times, and for allocating each program to at least one of the plurality of time slots based on the broadcast time of the program, wherein the programs have varying lengths of time and the allocation is performed for each program with reference to a relative start time and a relative end time within a selected time slot in the retrieval table, at least one of the relative start time and the relative end time associated with a

given program being different than the predetermined start and end times for a given time slot; and means for generating a program table for display to a user based on the retrieval table."

Claim 4 includes "producing a retrieval table based on the program guide information, the retrieval table comprising a plurality of time slots each having a predetermined length of time including predetermined start and end times that are independent of the program broadcast times; allocating each program to at least one of the plurality of time slots based on the broadcast time of the program, wherein the programs have varying lengths of time and the allocation is performed for each program with reference to a relative start time and a relative end time within a selected time slot in the retrieval table, at least one of the relative start time and the relative end time associated with a given program being different than the predetermined start and end times for a given time slot; generating a program table for display to a user based on the retrieval table."

Claim 11 includes "means for setting relative start and end times of the selected programs in at least one timeslot, for generating clone program guide objects from the program guide objects, and for allocating the clone program guide objects on the retrieval table with reference to the at least one timeslot; and means for generating a program table for display to a user based on the clone program guide objects of the retrieval table; wherein at least one of the relative start time and the relative end time associated with a given one of the selected programs is different than predetermined start and end times for the at least one timeslot."

And claim 12 includes "setting relative start times of the selected programs in at least one timeslot, the relative start time associated with a given one of the selected programs being different than predetermined start and end times for the at least one timeslot; generating clone program guide objects from the program guide objects; allocating the clone program guide objects on the retrieval table with reference

to the at least one timeslot; generating a program table for display to a user based on the clone program guide objects of the retrieval table."

Applicant submits that these limitations are not taught or disclosed in either reference, or in the combination of the references.

As discussed in the prior responses to earlier Office Actions, *Alten* is directed to an electronic program scheduling system "that provides the viewer with a more versatile, readable, and aesthetically pleasing display of program listings as well as promotional information." (Col.1 ll.8-12.) The system includes "head end" cable system equipment 10 and a master uplink installation 100. (See FIG. 1.)

The master uplink installation 100 compiles television program schedules and promotional data. (See col.5 ll.31-32.) Within the master uplink installation, "[d]ata processor 110 processes the various data including the program schedule listings stored in database 120, channel map data stored in database 130, and the promotional information stored in database 140. Text fit data processor 115 provides a computer system for editing the program schedule listings descriptions so that they may fit in different size display cells, and is described later." (Col.5 ll.32-39.)

The listings database 120 of the master uplink installation 100 "contains the program listings for all cable networks, local stations (including their affiliated network programs), in addition to pay-per-view events." (Col.5 ll.39-42.) The master uplink installation 100 generates television program schedule information and promotional material to the cable head-end 10 (see col.5 ll.21-23). Furthermore, "Updates and changes to the program schedule information are made at the master uplink facility and then transmitted to the participant cable system." (Col.6 ll.58-60.)

Once the program schedule information is configured by the master uplink installation 100 and distributed to the cable head end equipment 10, the information can be distributed to an interactive cable converter box 200. (See col.14 ll.5-15.) According to *Alten*, the "length of the program determines the size of the cell

available for the display of the program title and other information." (Col.8 ll.61-63.) The text fit system determines how to generate a program table to display program titles based on the number of characters in the title and the grid cell size.

As stated in the Office Action on page 4, "*Alten* merely discloses the regular start and end times," which is not what is claimed. For instance, claim 1 requires relative start and end times within a selected time slot. The relative start and end times are used in the retrieval table, and a program table is generated based on the retrieval table. Thus, the stated deficiency propagates throughout the claims, for if *Alten* does not teach the claimed relative times, it cannot teach the claim elements pertaining to the retrieval table or the program table.

In order to overcome the stated deficiency of *Alten*, the Office Action relies on *Hooper*. *Hooper* teaches a video on demand system with specialized caches on the transmission side (server cache 24) and the receiver side (customer segment cache 14) as shown in FIGS. 2 and 8. These caches enable the system to stream video data to one or more customers. The customer(s) may start viewing segments of the video at predetermined time intervals. (See col.10 ll.15-26.) In one example, segments of a movie are started at multiples of five minutes. Due to this, "a customer has, at the most, to wait only five minutes to start viewing the selected video." (Col.10 ll.27-28.)

The Office Action asserts that *Hooper* teaches relative time slots. (Office Action, numbered section 2, pg. 2.) In particular, the Office Action states "The video segments in *Hooper* being relative to the thirty-minute time slots." (*Id.*) Applicant respectfully disagrees.

Upon careful review of *Hooper*, applicant is unable to find any reference of video segments being relative to any time slots, thirty minutes or otherwise. Furthermore, the segmented video streams of *Hooper* are not part of broadcast signals multiplexed with program guide information. Rather, as explained in the Office

Action, what *Hooper* does teach is "that a particular movie may be broadcast every 5 minutes." (Office Action, numbered section 4, pg. 4.) As explained in *Hooper*:

However, in an exemplary embodiment of the invention, the total number of viewing windows which can be active for a particular video at any one time is fixed to a predetermined number. For example, for a two hour feature length movie, the number of possible viewing windows may be fixed at 24, each window being an adjacent segment of the video. That is, segments can only be started at intervals which are multiples of five minutes, for example, at times 0, 5, and 10 minutes, relative to the beginning of the video. By fixing the number of viewing windows, the number of broadcast streams is likewise limited. Yet, with only 24 windows, a customer has, at the most, to wait only five minutes to start viewing the selected video.

(*Hooper*, col.10, ll.15-28.)

Thus, while a movie may be repeatedly rebroadcast every few minutes, there is no discussion that the video streams of *Hooper* are associated with program time slots wherein programs are allocated with reference to relative start and end times within a selected time slot in the manner claimed. There is also no indication in *Hooper* of a relative start time or the relative end time for a given program within a viewing window being different than the predetermined start and end times for a the viewing window. Therefore, *Hooper* fails to overcome the deficiencies of *Alten*.

Furthermore, independent claims 1 and 11 each include several means plus function limitations. In particular, claim 1 requires "receiving means," "separation means," production means for producing a retrieval table ... and for allocating each program," and "means for generating a program table." Claim 11 requires "means for identifying," "means for determining," "means for setting relative start and end times...", for generating clone program guide objects..., and for allocating the clone program guide objects," and "means for generating a program table."

Such limitations are to be interpreted under 35 U.S.C. § 112, 6th paragraph, as means-plus-function limitations. These features of applicant's claims are,

by way of example only, illustrated in Figs. 5 and 12-19 and are described in paragraphs 0041-0045 and 0086-0125 of the application.

In consideration of the aforementioned means plus function limitations, the Examiner's attention is directed to the Federal Circuit decision of *In re Donaldson Co., Inc.*, 16 F.3d 1189 (Fed. Cir. 1994) *en banc*. The Federal Circuit held that § 112, ¶ 6 applies not only in infringement determinations, but also in patentability determinations. It is well established that claims are to be given their broadest reasonable interpretation during prosecution. However, the Federal Circuit's decision set a limit on how broadly the United States Patent and Trademark Office can construe means-plus-function language under the rubric of reasonable interpretation. Specifically, the Federal Circuit held that the broadest reasonable interpretation that an Examiner may give means-plus-function language is that statutorily mandated in § 112, ¶ 6. Therefore, one must construe means-plus-function language in a claim by looking to the specification and interpret that language in light of the corresponding structure, material, or acts described therein, and equivalence thereof. "Per our holding, the 'broadest reasonable interpretation' that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, *the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.*" *Id.* at 1194-95 (emphasis added). Thus, the statement in the Office Action on page 2 that "applicant cites various portions of the specification, and then argues that Hooper does not teach the subject matter. Examiner points out that a proper rejection does not require for the references to meet each and every element of the specification, but only the subject matter recited [in the claim]" is not fully accurate in view of the aforementioned means plus function limitations.

The M.P.E.P. is fully consistent with *In re Donaldson*. (See § 2181.) Therefore, according to the law and the PTO's own guidelines, one must construe

means-plus-function language in a claim by looking to the specification and interpret that language in light of the corresponding structure, material, or acts described therein, and equivalence thereof.

In particular, "the invalidating prior art must disclose not simply a means for achieving the desired function, but rather the particular structure recited in the written description corresponding to that function, or an equivalent thereof." (*McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1361 (Fed. Cir. 2001), emphasis added.) Accordingly, the Examiner may not disregard the structure disclosed in applicant's specification corresponding to the means-plus-function language when rendering a patentability determination. In the present case, this appears to be exactly what has been done.

By way of example only, with regards to the "means for generating," limitations of claims 1 and 11, the Office Action merely states "The additionally claimed means for generating a program table for display to a user based retrieval table is met by the combination of the DSTB in Alten which creates an EPG (Fig. 7a) and Hooper (Fig. 6)." (Office Action, numbered section 4, pg. 5) Unfortunately, the specific structure(s) relied on in *Hooper* and/or *Alten* are not identified.

Thus, the Examiner has not made the required comparison of the structures disclosed in applicant's specification for achieving the claimed functions with any structure(s) disclosed in *Hooper* or *Alten* which the Office Action asserts meets the claim limitations. See the M.P.E.P. at section 2182, which states:

Both before and after *Donaldson*, the application of a prior art reference to a means or step plus function limitation requires that the prior art element perform the identical function specified in the claim. However, if a prior art reference teaches identity of function to that specified in a claim, then under *Donaldson* an examiner carries the initial burden of proof for showing that the prior art structure or step is the same as or equivalent to the structure, material, or acts described in the specification which has been identified as corresponding to the claimed means or step plus function.

The "means or step plus function" limitation should be interpreted in a manner consistent with the specification disclosure.

(M.P.E.P. § 2182 at pg. 234, emphasis in original.)

In particular, "If the specification defines what is meant by the limitation for the purposes of the claimed invention, the examiner should interpret the limitation as having that meaning." (M.P.E.P. § 2182 at pg. 235.) If not identical, "the examiner should provide an explanation and rationale in the Office action as to why the prior art element is an equivalent." (M.P.E.P. § 2183 at pg. 235.) Furthermore, "In addition to the conclusion that the prior art element is an equivalent, examiners should also demonstrate, where appropriate, why it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute applicant's described structure, material, or acts for that described in the prior art reference." (*Id.* at pg. 236.)

The omitted comparison and attendant analysis is a fatal flaw in the rejection which, without more, compels withdrawal of the rejection at least as to claims 1 and 11. The fact is there is no disclosure in the asserted references which performs the aforementioned functions pursuant to applicant's claimed invention as set forth in independent claims 1 and 11.

As to the second reason, there is simply no motivation to modify *Alten* or to combine it with the teachings of *Hooper* to arrive at the claimed invention. According to the Office Action, "It would have been obvious for one of ordinary skill in the art a[t] the time the invention was made, to modify *Alten* with the feature of the start and end times of broadcasts being different from given time slots, at least for the desirable improvement of providing the subscriber with more program reception options as taught by *Hooper*" (Office Action, numbered section 4 at pg.4.)

With regard to obviousness, "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings."

(M.P.E.P. § 2143.) According to the M.P.E.P., "the proper inquiry is 'whether there is something in the prior art as a whole to suggest the *desirability*, and thus the obviousness, of making the combination.'" (M.P.E.P. § 2143.01, quoting *In re Fulton*, 391 F.3d 1195, 1200-01 (Fed. Cir. 2004), emphasis in original.) As stated in *In re Oetiker*, 997 F.2d 1443, 1447, 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992), "[t]here must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge cannot come from the applicant's invention itself."

No explanation from the prior art or discussion of the teachings or motivation of the prior art support the purported rational to combine the references. As explained above, *Hooper* addresses issues in a video on demand system. This includes providing multiple "viewing windows" for the same segment of video. In the example quoted above, the windows may start every 5 minutes. Thus, if a viewer misses the start of the video segment for one window, he or she only has to wait at most 5 more minutes before viewing the same video segment in another window. This is fundamentally different from what is claimed. Thus, not only does *Hooper* fail to overcome the deficiencies of *Alten*, but the motivation to make the combination of *Hooper* and *Alten* also fails because the "program reception options" of *Hooper* (i.e. re-broadcasting the same video segment at set time intervals) is irrelevant to the claimed invention.

Rather than finding the motivation to combine/modify the references in the prior art, the rejection is a classic example of hindsight reconstruction in which features are selected from different prior art references to create the subject matter claimed in independent claims 1, 4, 11 and 12. However, the law is clear. "It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered

obvious." *Texas Instruments, Inc. v. U.S. Int'l Trade Comm'n*, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1993.)

Furthermore, even if one could combine the teachings of *Hooper* with those of *Alten*, which applicant does not believe is the case, it would still not result in the claimed invention as explained above. At best, one would have the regular start and end times of *Alten* and repeated broadcasts of the same content from *Hooper*. This is not what is claimed.

As to the third reason, because *Alten* and *Hooper* do not disclose the aforementioned limitations and because the references do not address the problems solved by the claimed invention, there is no reasonable expectation of success that combining the references would result in the claimed invention.

For at least these reasons, applicant respectfully submits that the rejection of independent claims 1, 4, 11 and 12 should be withdrawn. Claims 3, 6, and 13-16 depend from the independent claims and contain all of the limitations thereof as well as other limitations that are neither disclosed nor suggested by the prior art of record. Accordingly, applicant submits that these dependent claims are likewise patentable.

Claims 17-18 were rejected over *Alten* and *Hooper* in view of Official Notice. And claims 2 and 5 were rejected under 35 U.S.C. § 103(a) as being obvious over *Alten* in view of U.S. Patent No. 5,812,124 ("*Eick*"). *Eick* does not overcome the deficiencies of *Alten* and *Hooper* with respect to the independent claims. Claims 2 and 5 depend from claims 1 and 4, respectively, and contain all of the limitations thereof as well as other limitations that are neither disclosed nor suggested by the prior art of record. Accordingly, applicant submits that these dependent claims are likewise patentable.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the

Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which he might have. If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: February 20, 2007

Respectfully submitted,

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